

I CLAIM:

1. A method of transporting packets from a first voice switch coupled to a communication network, comprising:
 - receiving, at the first voice switch, information bearing packets from a first subscriber intended for routing to a second subscriber;
 - multiplexing said packets onto a transport stream intended for a second voice switch serving said second subscriber, responsive to a determination that said first switch and said second switch are compatible; and
 - enabling the communication of said transport stream to said communication network.
2. The method of claim 1, wherein said step of enabling further comprises creating a packet transport medium.
3. The method of claim 2, wherein said step of creating a packet transport medium further comprises creating an Asynchronous Transfer Mode (ATM) physical layer over a Digital Signal Level Zero (DS0) communication link.
4. The method of claim 3, wherein said step of creating a packet transport medium further comprises creating an ATM logical path over said DS0 link.
5. The method of claim 3, wherein said step of creating a packet transport medium further comprises creating an Asynchronous Transfer Adaptation Layer 2 (AAL2) layer over said DS0 link.
6. The method of claim 1 wherein said transport stream comprise AAL2 packets.
7. The method of claim 6, wherein said AAL2 packet comprises:
 - a caller identifier field for identifying a caller.

8. The method of claim 6, wherein said AAL2 packet comprises:
a length indicator field for identifying the size of a payload.

9. The method of claim 7, wherein said AAL2 packet comprises:
a header error check field for identifying errors in the call identifier
field.

10. The method of claim 6, wherein said AAL2 packet comprises:
a payload field for transporting said packets.

11. The method of claim 6, wherein said AAL2 packet comprises:
a User-to-User Indicator field for providing a link between a CPS sub-
layer and a Service Specific Convergence sub-layer (SSCS) of the AAL2
packet.

12. The method of claim 1, wherein said packets are compressed voice
packets.

13. The method of claim 1, wherein at least one of said voice switches is
a private branch exchange (PBX).

14. The method of claim 1, wherein at least one of said first and second
switches is a local exchange.

15. A method of transporting voice traffic between a first voice switch, over
a Public Switched Telephone Network (PSTN), to a second voice switch,
comprises:
receiving, at the first voice switch servicing a first subscriber, an
analog voice call from the first subscriber for routing to a second subscriber;
digitizing said voice traffic;
packetizing said digitized traffic;
compressing said packetized traffic;

multiplexing said packets onto a transport stream intended for a second voice switch serving said second subscriber, responsive to a determination that said first switch and said second switch are compatible; and

enabling the communication of said transport stream to said PSTN.

16. The method of claim 15, wherein said step of enabling further comprises creating a packet transport medium.

17. The method of claim 16, wherein said step of creating a packet transport medium further comprises creating an Asynchronous Transfer Mode (ATM) physical layer over a Digital Signal Level Zero (DS0) communication link.

18. The method of claim 17, wherein said step of creating a packet transport medium further comprises creating an ATM logical path over said DS0 link.

19. The method of claim 17, wherein said step of creating a packet transport medium further comprises creating an Asynchronous Transfer Adaptation Layer 2 (AAL2) layer over said DS0 link.

20. The method of claim 15, wherein said transport stream comprise AAL2 packets.

21. The method of claim 20, wherein said AAL2 packets comprises at least one of:

- a call identifier field for identifying a caller;
- a length indicator field for identifying the size of a payload;
- a header error check field for identifying errors in the call identifier field; and
- a payload field for transporting said packets.

a User-to-User Indicator field for providing a link between a CPS sub-layer and a Service Specific Convergence sub-layer (SSCS) of the AAL2 packet.

22. The method of claim 15, wherein at least one of said voice switches is a private branch exchange (PBX).

23. The method of claim 15, wherein at least one of said first and second switches is a local exchange.

24. An apparatus comprising:

a first voice switch for receiving information bearing packets from a first subscriber intended for routing to a second subscriber over a network;

 said first switch, in response to a determination that said first switch and a respective second voice switch are compatible, multiplexing said packets onto a transport stream intended for said second voice switch; and enabling the communication of said transport stream to said communication network.

25. The apparatus of claim 24, wherein said first switch creates a packet transport medium between said first and second switch.

26. The apparatus of claim 25, wherein said first voice switch creates an Asynchronous Transfer Mode (ATM) physical layer over a Digital Signal Level Zero (DS0) for transporting said packets on said packet transport medium.

27. The apparatus of claim 26, wherein said first voice switch creates an Asynchronous Transfer Mode Adaptation Layer 2 (AAL2) layer over said DS0 for transporting said packets on said packet transport medium.

28. The apparatus of claim 24, wherein said transport stream comprise AAL2 packets.

29. The apparatus of claim 28, wherein said AAL2 packet comprises at least one of :

- a call identifier field for identifying a caller;
- a length indicator field for identifying the size of a payload;
- a header error check field for identifying errors in the call identifier field;
- a payload field for transporting said packets; and
- a User-to-User Indicator field for providing a link between a CPS sub-layer and a Service Specific Convergence sub-layer (SSCS) of the AAL2 packet.

30. The apparatus of claim 24, wherein said packets are compressed voice packets.

31. The apparatus of claim 24, wherein at least one of said voice switches is a private branch exchange (PBX).

32. The apparatus of claim 24, wherein at least one of said voice switches is a local exchange switch.